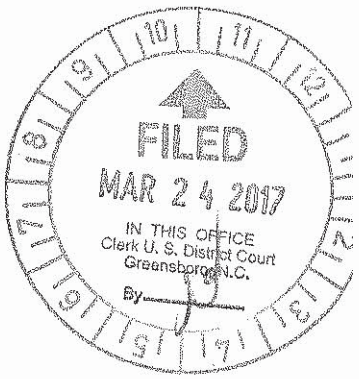

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

SYNGENTA CROP PROTECTION, LLC,	)	
Plaintiff,	)	
v.	)	1:15-CV-274
WILLOWOOD, LLC, et al.,	)	
Defendants.	)	

MEMORANDUM OPINION AND ORDER

Catherine C. Eagles, District Judge.

Syngenta Crop Protection, LLC has sued four affiliated companies denominated collectively here as Willowood,[1] alleging patent and copyright infringement. Syngenta contends Willowood has infringed its patents in connection with the manufacture and sale of Willowood's Azoxy 2SC, AzoxyProp Xtra, and Tebustrobin SC products and has infringed its copyrights by verbatim copying of Syngenta product labels. Syngenta seeks partial summary judgment on Counts I through IV, asserting that its 5,602,076 Patent, 5,633,256 Patent, 5,847,138 Patent, and 8,124,761 Patent are valid and that Willowood infringed the patents. Syngenta makes related evidentiary objections to opinion testimony by the defendant's expert Dr. Mark A. Lipton.[2] Willowood seeks summary

[1] The defendants are Willowood, LLC; Willowood USA, LLC; Willowood Azoxystrobin, LLC; and Willowood Limited. Where it is necessary to distinguish between the defendants, these companies are referenced individually as W-LLC, W-USA, and W-Ltd.

[2] Syngenta has objected to other expert testimony and related declarations, which the Court will address in separate orders.

judgment on Count IV, asserting that its products do not infringe the '761 Patent as a matter of law, and on Counts V and VI, asserting that Syngenta does not have a valid copyright and that its copying constituted fair use.

The Court will grant in part and deny in part Syngenta's motion for summary judgment and will deny Willowood's motion for summary judgment as to Count IV. The Court retains under advisement Willowood's motion for summary judgment as to Counts V and VI, which will be resolved by separate order.

I. Facts

The following facts are undisputed. Syngenta holds several patents protecting azoxystrobin, a fungicidal compound used to protect various crops, and the process for making it.[3] The '076 and '256 Patents expired on February 11, 2014, and the '138 Patent expired on December 8, 2015. Doc. 96-1 at ¶¶ 29, 30. The '761 Patent will expire in April 2029. *Id.* at ¶ 31. Willowood sells generic versions of crop-protection products, including the generic azoxystrobin fungicides Azoxy 2SC and AzoxyProp Xtra. Doc. 12 at ¶¶ 73, 75; Doc 16 at ¶¶ 4, 8. Willowood and Syngenta use azoxystrobin technical, a relatively pure form of the chemical compound azoxystrobin, as the active ingredient in their azoxystrobin fungicides. Doc. 96-1 at ¶¶ 34-35; Doc. 12 at ¶ 37 (admitting allegation in Doc. 1 at ¶ 37).

[3] *See* Doc. 12 at ¶¶ 20-21; Doc. 96-1 at ¶¶ 29-31; Doc. 1-8 (the '076 Patent); Doc. 1-9 (the '256 Patent); Doc. 1-10 (the'138 Patent); Doc. 1-11 (the '761 Patent). All citations in this opinion are to the ECF docket and page numbers, or where appropriate internal paragraph designations, except for deposition transcripts, where citations are to the ECF docket number and the deposition page and line numbers provided by the court reporter.

II. Count I (the '076 Patent) and Count II (the '256 Patent)

Syngenta moves for summary judgment on these two counts, contending that the evidence shows that the two patents are valid and that Willowood infringed the patents. The Court views the evidence in the light most favorable to Willowood, the non-moving party, as is appropriate at summary judgment.

a. Validity

Patents are "presumed valid," 35 U.S.C. § 282(a), unless the defendant can show invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011); *Insite Vision Inc. v. Sandoz, Inc.*, 783 F.3d 853, 858 (Fed. Cir. 2015). Willowood presents no evidence of invalidity for either the '076 or '256 Patents. Doc. 137 at 17:13-18:15. The Court will grant summary judgment for Syngenta on this issue.

b. Infringement

i. Relevant Facts

The '076 and '256 Patents claim a group of chemical compounds, which include azoxystrobin. Docs. 1-8, 1-9; Doc. 96-1 at ¶¶ 74, 87. In 2013, W-Ltd bought five kilograms of azoxystrobin technical from its Chinese supplier, Yangcheng Tai He Chemicals Corp., ("Tai He"), and sold it to W-USA. *See* Doc. 137 at 41:12-:15; Doc. 105 at 6-7 n.3; Doc. 15 at ¶ 6. W-USA imported the five kilograms of azoxystrobin technical into the United States before the expiration of the two patents. Doc. 96-7 at 3; Doc. 96-9 at 5, 6. W-LLC commissioned Adjuvants Unlimited, Inc. to formulate fungicides using azoxystrobin technical and to create product samples. *See* Doc. 137 at 26:3-:7. W-LLC then commissioned Analytical & Regulatory Chemistry, Inc. (ARC) to

analyze the product samples for its EPA applications. Doc. 96-7 at 3; Doc. 96-10 at 41:21-42:10. Before performing these studies, and before importing the azoxystrobin technical, Willowood knew of the '076 and '256 Patents and knew that these activities would likely infringe the patents. *See* Doc. 96-7 at 3; Doc. 96-10 at 305:11-:18.

ii. Direct Infringement by W-USA and W-Ltd

Anyone who "makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention" without the patent holder's permission has infringed the patent. 35 U.S.C. § 271(a).

Willowood concedes that in 2013, W-USA infringed the '076 and '256 Patents by importing five kilograms of azoxystrobin technical into the United States. Doc. 96-9 at 5, 6. The Court will grant summary judgment against W-USA on these two counts.

Willowood also concedes that W-Ltd sold azoxystrobin technical to W-USA, which is located in Roseburg, Oregon. *See* Doc. 15 at ¶ 6; Doc. 16 at ¶ 3. Willowood asserts that the sale did not infringe because the shipment of azoxystrobin technical "FOB China" by W-Ltd, a Hong Kong company, was not a sale "within the United States" under § 271(a). *See* Doc. 15 at ¶ 3, 6; Doc. 137 at 18:16-:19.

Free on board or "FOB" is a shipping term that indicates when in the delivery process title transfers from the buyer to the seller. *Litecubes, LLC v. N. Light Prods., Inc.*, 523 F.3d 1353, 1358 n.1 (Fed. Cir. 2008). "FOB China" means that title transferred to the buyer, W-USA, when the seller, W-Ltd, conveyed the goods to the shipper in China. *See id.* at 1358 n.1, 1369.

In analyzing where a sale took place, the Court should not "exalt form over substance." *Id.* at 1370 (quoting *N. Am. Philips Corp. v. Am. Vending Sales, Inc.*, 35 F.3d 1576, 1579 (Fed. Cir. 1994)). When other factors indicate an intention to sell infringing products to customers in the United States, shipment FOB a location abroad neither limits the place of sale to the location from which the goods were shipped nor precludes liability under § 271. *SEB S.A. v. Montgomery Ward & Co., Inc.*, 594 F.3d 1360, 1375 (Fed. Cir. 2010), *aff'd sub nom. Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754 (2011); *see also Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1310-11 (Fed. Cir. 2010). To determine the location of the sale, the fact-finder can consider the location of the buyer and seller, *N. Am. Philips*, 35 F.3d at 1579, "where the products were shipped from and where the products were shipped to," *SEB*, 594 F.3d at 1375, "the transfer of tangible property," *Transocean*, 617 F.3d at 1311, and "the agreement by which such a transfer t[ook] place." *Id.*; *see also Litecubes*, 523 F.3d at 1369.

Here, the seller, W-Ltd, was in Hong Kong, Doc. 15 at ¶ 3, while the buyer, W-USA, was in the United States. Doc. 16 at ¶ 3. W-Ltd shipped the azoxystrobin technical FOB China to W-USA, for delivery in the United States. *See id.* at ¶ 8; Doc. 15 at ¶ 6. There is a genuine issue of material fact on whether the sale took place in the United States. *See SEB*, 594 F.3d at 1375 (approving instructions to the jury to consider evidence including FOB terms, invoices with U.S. companies, and delivery to the United States to determine the location of the sale). Summary judgment will be denied as to whether W-Ltd infringed.

iii. Indirect Infringement by W-LLC

"Whoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b). Induced infringement requires (1) "active steps taken to encourage direct infringement," *Takeda Pharm. U.S.A., Inc. v. W.-Ward Pharm. Corp.*, 785 F.3d 625, 630 (Fed. Cir. 2015) (quotation omitted), and (2) knowledge or willful blindness that the induced acts constitute patent infringement. *Glob.-Tech Appliances*, 563 U.S. at 766, 768. An active step sufficient for induced infringement includes causing, urging, encouraging, or aiding another to infringe the patent. *Takeda Pharm.*, 785 F.3d at 631 n.3 (citing *Tegal Corp. v. Tokyo Electron Co., Ltd.*, 248 F.3d 1376, 1379 (Fed. Cir. 2001)).

W-LLC commissioned Adjuvants to formulate azoxystrobin fungicides from the imported azoxystrobin technical and commissioned ARC to analyze samples of the resulting end products. Doc. 137 at 20:9-:19, 26:3-:7; Doc. 96-10 at 41:21-42:10. W-LLC knew that this use of azoxystrobin technical by Adjuvants and ARC would infringe Syngenta's patents. Doc. 96-10 at 305:5-:18. By commissioning Adjuvants and ARC to undertake formulation and analysis that required using azoxystrobin technical, W-LLC actively induced infringement of the '076 and '256 Patents. The Court will grant summary judgment in favor of Syngenta against W-LLC.

III. Count III (the '138 Patent)

a. Validity

Syngenta moves for summary judgment as to the validity of the '138 Patent, which protects a chemical process used to produce azoxystrobin technical. Willowood proffers

Dr. Lipton's expert opinion as evidence that the '138 Patent is invalid due to obviousness, *see* 35 U.S.C. § 103, and asserts that summary judgment should be denied. Syngenta contends that Willowood's evidence of obviousness is insufficient to raise a disputed question of material fact and moves to exclude Dr. Lipton's analysis.

As noted *supra*, the burden to show invalidity is on the challenger, and therefore Willowood must show by clear and convincing evidence that at the time of the invention, the patent's claimed subject matter was obvious to a person of ordinary skill in the art. *Plantronics, Inc. v. Aliph, Inc.*, 724 F.3d 1343, 1353 (Fed. Cir. 2013). To prove obviousness, the defendant must explicitly provide "[a] reason for combining disparate prior art references." *InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1351 (Fed. Cir. 2014); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (requiring that arguments explicitly provide an "articulated reasoning with some rational underpinning" to make the asserted combinations (quoting *In re Kahn,* 441 F.3d 977, 988 (Fed. Cir. 2006))).

In evaluating obviousness, an expert should take steps "to guard against slipping into use of hindsight and to resist the temptation to read into the prior art the teachings of the invention in issue." *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 36 (1966) (quotation omitted); *see KSR Int'l*, 550 U.S. at 421 (noting a factfinder "must be cautious of arguments reliant upon *ex post* reasoning"); *Insite Vision*, 783 F.3d at 859. In this case, Dr. Lipton stated several times that "the substance of claim 6" was the "starting point" of his obviousness analysis. Doc. 96-15 at 142:8-:21, 144:5-:6. He explicitly admitted that he started with Claim Six and worked backwards. Doc. 96-15 at 140:7-:19.

Relying on *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001), Willowood contends that "an analysis of claim validity must start with the claim itself." Doc. 102 at 13. However, *Interactive* involved claim construction, not validity, and it does not justify a hindsight analysis. *See* 256 F.3d at 1331. Willowood also asserts that Dr. Lipton only started with Claim Six to identify prior art and to understand the invention. *See* MPEP § 2145(X)(A) (9th ed. Nov. 2015). However, his deposition belies this assertion:

> Q: So as part of your invalidity analysis you assume that someone of ordinary skill would be interested, in the first instance, in making compound (XV) from compound (X), correct?
> A: Since that is the substance of claim 6, that's my starting point.

Doc. 96-15 at 142:16-:21. Willowood points to no explanation from Dr. Lipton indicating that he had a reason beyond the '138 Patent to assume that a person of ordinary skill would be motivated to attempt the intermediate combinations of prior art necessary to achieve the '138 Patent's process. Dr. Lipton analyzed obviousness using the "patent itself as [a] roadmap" and "did not articulate reasons why a person of ordinary skill in the art at the time of the invention would combine" particular prior art references. *InTouch Techs.*, 751 F.3d at 1351; *see* Doc. 96-15 at 146:11-:20.

Because of the hindsight embedded in his analysis and the lack of reasons for combining the relevant prior art, Dr. Lipton's expert opinion is not the product of a reliable method and will not help the jury determine obviousness. *See* Fed. R. Evid. 702; *InTouch Techs.*, 751 F.3d at 1351-52. The Court will grant Syngenta's motion to exclude this evidence. Without any additional evidence on the validity of the '138 Patent,

Willowood cannot meet its burden to demonstrate obviousness.[4] The Court will grant summary judgment for Syngenta on the issue of the validity of the '138 Patent.

b. Infringement

The '138 Patent claims a process for preparing a group of compounds, including azoxystrobin, by performing an etherification step followed by a condensation step. *See* Doc. 96-1 at ¶¶ 94-99, 111-13; Doc. 1-10 at 16-17. It is undisputed that W-Ltd buys azoxystrobin technical from Tai He and sells it to W-USA, and that W-USA imports the azoxystrobin technical into the U.S. and uses it to formulate its end products, which W-LLC sells to the public. Doc. 96-10 at 64:4-:15, 278:4-:14; Doc. 96-8 at 3. It further is undisputed that the azoxystrobin technical that W-Ltd buys from Tai He is made overseas by a process that contains the etherification and condensation steps set forth in the '138 patent. *See* Doc. 99-9 at 23, 28;[5] Doc. 99-8 at 4-5, 7; Doc. 137 at 40:9-41:10.

[4] Willowood suggested at oral argument that even without Dr. Lipton's testimony, it can prove invalidity through the prosecution history. Doc. 137 at 60:10-:16 (suggesting that the prosecution history alone could convince the jury of obviousness). *But see* Doc. 137 at 50:10-:15 (conceding that Dr. Lipton's testimony is the only evidence of obviousness). Willowood has since filed the prosecution history. Doc. 133-1. Willowood has not identified the relevant portions of the history in its briefing or explained how it supports obviousness. The Court will not scour the record to locate evidentiary support. *Hughes v. B/E Aerospace, Inc.*, No. 1:12CV717, 2014 WL 906220, at *1 n.1 (M.D.N.C. Mar. 7, 2014) ("A party should not expect a court to do the work that it elected not to do."); *see also Ritchie v. Glidden Co.*, 242 F.3d 713, 723 (7th Cir. 2001) ("[A] court is not required to scour the record in search of evidence to defeat a motion for summary judgment" (quotation omitted)). Since it was not raised in the briefing, Syngenta has not had an opportunity to address Willowood's argument. Consequently the Court has not considered the prosecution history.

[5] The parties have submitted much of the evidence in this case under seal, subject to motions to seal. The Court will resolve those motions to seal by separate order.

It is an act of infringement to "import[] into the United States or offer[] to sell, sell[], or use[] within the United States a product which is made by a process patented in the United States." 35 U.S.C. § 271(g). Syngenta contends that it is entitled to summary judgment on infringement because the Willowood entities infringed the '138 Patent under § 271(g) by importing into the United States azoxystrobin technical made by the claimed process, using it to formulate end products, and selling the azoxystrobin technical and resulting end products in the United States. Willowood asserts that § 271(g) requires that a single entity perform the patented process and that the evidence here shows that no single entity performed all the steps claimed in the '138 Patent.

The Federal Circuit has not decided whether the single entity requirement applies to claims of infringement under § 271(g), and there do not appear to be district court decisions on this question. While there are arguments both ways, the Court concludes that the single-entity rule in § 271(a) should also apply in § 271(g) infringement actions.

The single-entity rule requires that "all steps of a claimed method are performed by or attributable to a single entity." *See Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015) (en banc) (per curiam). If more than one actor is involved in practicing the steps, "the acts of one are attributable to the other such that a single entity is responsible for the infringement . . . . in two sets of circumstances: (1) where that entity directs or controls others' performance, and (2) where the actors form a joint enterprise." *Id.*

Here, there is a factual dispute as to whether all steps of the process claimed by the '138 Patent are performed by or attributable to a single entity. Syngenta has evidence

that Tai He either performed all of the claimed steps of the '138 Patent, *e.g.*, Doc. 99-9 at 23, 28 (stating that the etherification and condensation steps are "carried out at" Tai He), or alternatively that Willowood arranged for Tai He and other entities to manufacture azoxystrobin according to the patented process. Doc. 99-8 at 4-5; Doc. 96-10 at 229:2-:8, 252:12-253:8. Willowood points to conflicting evidence indicating that Tai He controls its own process, acts independently from Willowood, and contracts at arms-length with other companies, who perform portions of the manufacturing process. Doc. 105-4 at 20:5-21:18.

Finding a disputed question of material fact, the Court will deny Syngenta's motion for summary judgment as to the infringement of the '138 Patent.

IV. Count IV (the '761 Patent)

The '761 Patent claims a process for making azoxystrobin technical that uses DABCO,[6] a catalyst, at concentrations between 0.1 and 2 mol % for the condensation step. Doc. 1-11 at 2; Doc. 96-1 at ¶ 31. Syngenta moves for summary judgment on the issue of validity. Syngenta and Willowood both move for summary judgment as to the infringement of the '761 Patent.

a. Validity

To meet its burden to show invalidity, Willowood offers Dr. Lipton's expert testimony to show that the '761 Patent was obvious in light of Weintritt, an earlier patent application. In turn, Syngenta moves to exclude this testimony, contending that hindsight

[6] DABCO stands for 1,4-diazabicyclo[2.2.2]octane. Doc. 1-11 at 3.

bias infected Dr. Lipton's analysis and that he parrots Willowood's counsel, rather than presenting his own opinion and analysis. Syngenta further contends that Dr. Lipton's opinions are insufficient to establish invalidity based on obviousness.

i. Admissibility of Dr. Lipton's Opinion

In contrast with Dr. Lipton's invalidity analysis for the '138 Patent, where he started with the patent's claim and worked backwards, Dr. Lipton's obviousness analysis for the '761 patent starts with the prior art reference. His report describes why a person of ordinary skill in the art would want to minimize the amount of catalyst from that claimed in the Weintritt reference. *See* Doc. 96-3 at ¶¶ 36, 39 (noting researchers are motivated to decrease the amount of catalyst used to lower costs and health hazards).[7]

Dr. Lipton attests that he performed his own analysis. Doc. 96-15 at 38:18-:20 ("I arrived at a decision about invalidity based on discussions with counsel and my own reading of the patents."); *see also* Doc. 96-15 at 35:12-:15. In his deposition, he was responsive to counsel's questions and demonstrated a firm understanding of his report. *See* Doc. 96-15. His report explains the patent's chemistry, the role of a catalyst in a chemical reaction, and how manipulation of the catalyst affects the reaction. Doc. 96-3 at ¶¶ 33-40. Every indication is that the opinions expressed in his report are his own, and those opinions will not be excluded. *Cf. Numatics, Inc. v. Balluff, Inc.*, 66 F. Supp. 3d 934, 941-43, 945 (E.D. Mich. 2014) (excluding opinion after the expert admitted that he

[7] In his report, Dr. Lipton refers to Weintritt as the '723 Patent. Doc. 96-3 at ¶ 18.

signed a report written by the lawyer and showed a lack of understanding both of the facts and relevant legal standards).

Syngenta has not identified any evidence of hindsight bias in Dr. Lipton's analysis. Rather, Syngenta disputes his understanding of the teachings of the Weintritt reference. *See* Doc. 96-2 at ¶ 53 (Dr. Joseph Fortunak's testimony that "Weintritt would have discouraged . . . using DABCO at even lower amounts"). This is a question of fact underlying the obviousness analysis. *Apple Inc. v. Samsung Elecs. Co., Ltd.*, 839 F.3d 1034, 1051 (Fed. Cir. 2016) (en banc), *pet. for cert. filed*, No. 16-1102 (U.S. Mar. 10, 2017).

Dr. Lipton's report also includes verbatim an invalidity claims chart provided to him by counsel. Doc. 96-15 at 37:2-39:5; *see* Doc. 96-3 at pp. 21-26. The Court does not decide here whether this chart will be admissible at trial.

ii. Obviousness

Obviousness "is a question of law based on underlying questions of fact." *Plantronics*, 724 F.3d at 1353 (quotation omitted); *Apple Inc.*, 839 F.3d at 1051 ("What a prior art reference teaches and whether a skilled artisan would have been motivated to combine references are questions of fact."). As noted *supra*, Willowood must show obviousness by clear and convincing evidence.

As evidence of obviousness, Willowood offers Dr. Lipton's testimony that, based on Weintritt, a person of ordinary skill in the art would have been motivated to test smaller amounts of DABCO in the reaction, *see* Doc. 105-6 at ¶¶ 36-40, and the proximity of the '761 Patent's claimed range to the range described by Weintritt.

Compare Doc. 96-34 at 8 (claiming use of DABCO from 2 to 40 mol %) *with* Doc. 1-11 at 2 (claiming use of DABCO between .1 and 2 mol %). This evidence conflicts with Syngenta's evidence, including Dr. Fortunak's testimony on what Weintritt teaches. *See* Doc. 96-2 at ¶ 53.

There is a disputed question of material fact underlying obviousness. The Court will deny Syngenta's motion for summary judgment as to validity of the '761 patent.

b. Infringement of the '761 Patent

Syngenta and Willowood both move for summary judgment on the issue of infringement of the '761 Patent. They agree that if the azoxystrobin technical used by Willowood was made with DABCO within the claimed range, then Willowood infringes the '761 Patent by importing it, using it to make its end products, and selling those end products. Conversely, they agree that if DABCO is not used or is used outside the claimed range, then the products do not infringe. Doc. 137 at 67:10-:22. In its motion for summary judgment, Syngenta contends that Willowood should bear the burden to prove non-infringement under § 295. Syngenta also moves to exclude certain laboratory tests offered by Willowood as inadmissible. Willowood opposes these motions. Each party contends that either way, the Court should grant summary judgment in its favor.

i. Evidence of Infringement and Non-Infringement

Willowood provides testimony from Tai He's president, Wu Xiaolong, stating that neither Tai He nor its intermediaries use DABCO to manufacture azoxystrobin technical. Doc. 88-5. Willowood also provides analyses from JDM Research and Product Safety

Laboratories (PSL), which show that their azoxystrobin technical contains no DABCO.[8] Doc. 99-10 at 2 (JDM); Doc. 88-4 at 10 (PSL). This evidence, if believed, is sufficient to prove non-infringement.

In turn, Syngenta presents tests from two laboratories, CAC Shanghai and JDM Research,[9] which detected DABCO in Willowood's azoxystrobin technical, Doc. 99-1 at ¶¶ 129-133; Doc. 99-4 at 270:2-271:20, 273:19-275:11, and its own analysis that Willowood's Azoxy 2SC contains DABCO. Doc. 96-1 at ¶ 128. This is well sufficient to prove that DABCO was used.

Whether Syngenta has sufficient evidence showing that DABCO is used within the infringing amount is a closer question. Syngenta relies on Dr. Fortunak's analysis that it would not be commercially reasonable for Tai He to manufacture azoxystrobin technical using DABCO outside the range claimed by the '761 Patent. Doc. 96-1 at ¶ 138; Doc. 88-2 at 100:13-101:15. Dr. Fortunak is a Professor of Chemistry and Pharmaceutical Sciences at Howard University. Doc. 96-1 at ¶ 6. He has extensive experience in relevant product development, including transferring process technology to commercial scale production. *See id.* at ¶¶ 5-20. He appears qualified to offer such an

[8] As discussed *infra*, Willowood also offers inadmissible evidence from EAG, which shows that a form of azoxystrobin tested before the condensation step contained no DABCO.

[9] There appears to be some confusion about what the JDM results show and both sides offer the JDM tests to support their position. *See* Doc. 96-1 at ¶ 52 & n.31 (Dr. Fortunak relying on Mr. Heinze's testimony that JDM detected DABCO); Doc. 99-2 at ¶¶ 21-23 (Dr. Lipton explaining Mr. Heinze's confusion and that JDM did not detect DABCO).

opinion. While on the edge, the Court concludes that this creates a disputed question of material fact as to whether DABCO was used in an infringing amount.[10]

There is a genuine dispute of material fact as to whether DABCO is used in the manufacture of Willowood's azoxystrobin technical and if so, in what amount. Thus, the Court will deny both motions for summary judgment.

ii. Burden-Shifting under § 295

Syngenta and Willowood disagree on which party should bear the burden of proof on the claim of infringement of the '761 Patent. Ordinarily, the plaintiff bears the burden to show infringement, but when "the accused infringer is in a far better position to determine the actual manufacturing process than the patentee," the patent statute authorizes shifting the burden to the accused infringer to show non-infringement. *Creative Compounds, LLC v. Starmark Labs.*, 651 F.3d 1303, 1314-15 (Fed. Cir. 2011) (citation omitted). Section 295 provides:

> [I]f the court finds—
>
> (1) that a substantial likelihood exists that the product was made by the patented process, and
>
> (2) that the plaintiff has made a reasonable effort to determine the process actually used in the production of the product and was unable to so determine,
>
> the product shall be presumed to have been so made, and the burden of establishing that the product was not made by the process shall be on the party asserting that it was not so made.

35 U.S.C. § 295.

[10] If the Court is mistaken in this conclusion, it provides a further reason to shift the burden of proof. *See* discussion *infra* at pp. 16-24.

Syngenta asserts that it has satisfied both prongs of the § 295 test, showing a substantial likelihood that Willowood's azoxystrobin technical was made with an infringing amount of DABCO and that it has made reasonable efforts to determine the actual process, without success. Willowood disagrees, emphasizing that Syngenta's evidence is insufficient and that Willowood disclosed the non-infringing manufacturing process for their azoxystrobin technical. The Court finds that Syngenta has shown both a substantial likelihood and reasonable efforts, and the Court will shift the burden to Willowood to show non-infringement at trial.

The Court has discretion to determine when § 295 "will be brought into play." *Nutrinova Nutrition Specialties & Food Ingredients GmbH v. Int'l Trade Comm'n*, 224 F.3d 1356, 1360 (Fed. Cir. 2000); *West v. Jewelry Innovations, Inc.*, No. C 07-1812 JF (HRL), 2009 WL 1010848, at *7 (N.D. Cal. Apr. 14, 2009) ("A district court may rule on a § 295 motion at any stage of the proceedings."). It is appropriate to consider this burden-shifting provision now: discovery has closed; the Court has the benefit of summary judgment briefing; and resolution of the issue now will allow for better trial preparation by the parties.

1. Substantial Likelihood

As the patent holder, Syngenta must show a substantial likelihood that the azoxystrobin technical imported and sold by Willowood was made by the patented process before burden-shifting is appropriate. 35 U.S.C. § 295(1). The patent holder must "present evidence that would support a reasonable conclusion that the imported product was made by the patented process," but need not show that the patented method

is the "only commercially practical method of manufacture." *West*, 2009 WL 1010848, at *8. This requires something less than proving the issue at trial by a preponderance of the evidence, but more than a slight possibility. *Id.* (citation omitted); *LG Display Co., Ltd. v. AU Optronics Corp.*, 709 F. Supp. 2d 311, 335 (D. Del. 2010); *see also Aventis Pharm., Inc. v. Barr Labs., Inc.*, 411 F. Supp. 2d 490, 510 (D.N.J.), *aff'd*, 208 F. App'x 842 (Fed. Cir.) (per curiam), *and aff'd,* 208 F. App'x 843 (Fed. Cir. 2006) (examining evidence for a "persuasive showing of substantial likelihood").

As discussed *supra*, Syngenta presents persuasive evidence that the azoxystrobin technical imported by Willowood was manufactured using DABCO during the condensation phase, including internal and external testing by several laboratories and admissions by Willowood. Its evidence that DABCO was used in an infringing amount—Dr. Fortunak's opinion about commercial reasonableness—is less strong. Nonetheless, given Dr. Fortunak's experience and qualifications, his opinion is adequate to make a "persuasive showing of substantial likelihood." *Aventis*, 411 F. Supp. 2d at 510. This is especially so in light of Willowood's failure to rebut Dr. Fortunak's opinion[11] and the absence of evidence that anyone actually manufactures azoxystrobin using DABCO by a method different than that claimed by the '761 Patent. Doc. 137 at 85:16-86:5.

[11] Willowood's expert, Dr. Lipton, has not offered any opinion on the commercial benefits and burdens of producing azoxystrobin according to particular methods. *See* Doc. 96-15 at 66:14-70:16, 121:20-122:2; Doc. 110-5 at 17:11-18:2, 19:1-:11.

While Willowood offers testimony from Tai He's president, Mr. Wu, that neither Tai He nor any of its intermediaries use DABCO to make azoxystrobin technical, Doc. 88-5, his testimony has credibility issues.[12] Moreover, Mr. Wu did not provide any manufacturing or batch records to confirm his testimony, even though he was asked for them and admitted they existed. *See* Doc. 96-13 at 87:6-88:4; Doc. 88-7. Nor has Willowood provided a non-infringing explanation for how DABCO and its by-products could be detected in its end products or the samples of azoxystrobin technical.

Because Syngenta offers significant persuasive evidence of the presence of DABCO, consistent with the use of the patented process, and expert testimony opining that the patented process is used, the Court finds Syngenta has shown a substantial likelihood that Willowood's azoxystrobin technical is made with the process claimed by the '761 Patent.

2. Reasonable Efforts

Syngenta contends that it made reasonable efforts to discover Tai He's process for producing azoxystrobin technical, but that it has been thwarted by Willowood's lack of full cooperation and its inability to get information from Tai He, a Chinese company. To show "reasonable efforts," the patentee must follow "all of the avenues of discovery likely to uncover the defendant's [or manufacturer's] process, including written discovery

[12] For example, Mr. Wu's testimony on other production matters contradicts manufacturing documents from Tai He. *Compare* Doc. 99-6 at 20:9-:12 (stating Guoshang creates intermediate from etherification step) *and* at 93:24-94:2 (stating condensation step is not performed at Tai He) *with* Doc. 99-9 at 23, 28 (noting the etherification and condensation steps are "carried out at" Tai He) *and* Doc. 96-10 at 246:10-247:8 (discussing email stating Tai He performs the etherification and condensation steps).

requests, facility inspections, first-hand observation of the process, independent testing of process samples, the use of experts, and depositions of the defendant's [or manufacturer's] officials." *LG Display Co.*, 709 F. Supp. 2d at 335 (quotation omitted).

Syngenta tested Willowood's azoxystrobin technical and the Azoxy 2SC end product, employed experts, and deposed representatives from Willowood. *See, e.g.*, Doc. 99-1 at ¶¶ 128-31; Doc. 96-10. Syngenta also attempted to obtain production documents and information from Willowood and Tai He. *See, e.g.*, Docs. 88-5, 88-6.

On December 17, 2015, Syngenta submitted several interrogatories and requests for production to Willowood, seeking information on the manufacture of Willowood's azoxystrobin technical. Doc. 96-5 at 12-13, 16; Doc. 96-6 at 11, 14. Willowood provided two documents describing Tai He's process, one that had been submitted to the EPA and one from its manufacturer Tai He. Docs. 99-9, 99-8. Syngenta followed up on March 1, 2016, asking Willowood to clarify what catalyst was used in the process or to state whether no catalyst was used. Doc. 96-28 at 2-3. Willowood responded that, to the best of its knowledge, DABCO was not used, but that it bought the azoxystrobin technical from Tai He. Doc. 96-29 at 2-3. On June 15, 2016, Syngenta requested that Willowood provide all communications between Willowood and Tai He and any agreements between the two companies not yet provided. Doc. 110-14 at 2-4. Willowood asserted that it had no written communications with Tai He, because they corresponded only in person, via telephone, or via a chat program that did not save correspondence. Doc. 110-15 at 2.

Finally, on July 26, 2016, following Willowood's decision to depose Mr. Wu at the end of the discovery period, Syngenta told Willowood it would need several categories of documents, including on the manufacturing process, from Tai He before the deposition so that the deposition would not be "significantly one-sided." Doc. 88-6 at 2. Willowood forwarded the request for documents to Tai He on July 28, 2016. Doc. 88-7 at 2-3. Shortly before the deposition on August 31, 2016, Doc. 99-6 at 3, and after the date originally established for the close of fact discovery on July 29, 2016, Doc. 48 at 2, Willowood provided another Tai He document describing the manufacturing process. *See* Doc. 99-17.

At his deposition, Mr. Wu testified that Tai He and its intermediaries make azoxystrobin technical without the use of DABCO. Doc. 88-5. He also affirmed that Tai He has production records with the ratios and quantities of materials used in the manufacturing process, *see* Doc. 96-13 at 87:6-88:4, but that no one associated with Willowood informed him that Syngenta was asking for those documents, apart from sharing the July 28 letter about a month before his deposition. *Id.* at 55:9-56:4. He did not produce any of these documents at his deposition, despite being aware that Syngenta had asked for them.

The Court finds that these efforts by Syngenta to discover how Willowood's azoxystrobin technical is made were reasonable. While Syngenta did not seek discovery directly from Tai He, Willowood itself admitted that it "is extremely difficult, if not impossible…to compel the Manufacturer [in China] to produce any documents," Doc. 75 at ¶ 11, and Mr. Wu appeared for his deposition voluntarily at the request of Willowood,

not under compulsion by law. Willowood had to obtain an extension of the discovery schedule in order to take Mr. Wu's deposition, which the Court allowed over Syngenta's objection, *see* Docs. 75, 78; Text Order 08/22/2016, and which prevented any follow-up discovery directly from Tai He. Moreover, given Tai He's location in China, requesting voluntary facility inspections or observing the process firsthand are unlikely possibilities for discovering information.

"Reasonable efforts" under § 295 do not require fruitless discovery attempts overseas or motions to compel against a party, like Willowood, who says it does not have the documents. *See Kemin Foods v. Pigmentos Vegetales Del Centro S.A. de C.V.*, No. 4:02-cv-40327, 2004 U.S. Dist. Lexis 17206, at *34-35, 45-47 (S.D. Iowa Aug. 27, 2004) (finding reasonable efforts and shifting the burden despite some cooperation by the defendant and no motions to compel). Moreover, Syngenta did not know that Tai He had additional production records not shared with Willowood until Mr. Wu's late deposition, a month after the close of fact discovery. *See id.* at *34-35 (applying § 295, noting *inter alia* that the defendant's failure to produce production documents creates problems for patent holder in proving infringement). Here, Syngenta repeatedly requested that Willowood provide the information, it conducted its own tests, employed experts, and it asked Tai He for the production records; this establishes that Syngenta has made reasonable efforts to obtain the information.

The Court further finds that despite these reasonable efforts, Syngenta has not been able to determine the process actually used in the production of the product, particularly as to the amount of DABCO used. As discussed above, Willowood provided

some information about the manufacturing process for its azoxystrobin technical. Docs. 99-8, 99-9, 99-17. However, this information has been inconsistent. *Compare* Doc. 99-9 at 14, 28 (noting the condensation step is "carried out at" Tai He) *with* Doc. 99-6 at 93:8-94:2 (stating Tai He oversees the condensation step, performed by Guangda). It does not explain the presence of DABCO in Willowood's end products or samples of azoxystrobin technical, and it is incomplete given the relevant production records held but not provided by Tai He. *See* Doc. 96-13 at 87:20-88:4; *see also Kemin Foods*, 2004 U.S. Dist. LEXIS 17206, at *43 (applying § 295 when patent holder "was left with a host of inconsistent observations, unexplained solvents, and constantly changing representations").

Willowood contends that it cooperated with discovery and provided Syngenta with relevant information about the process. Yet, Mr. Wu testified that no one associated with Willowood told him Syngenta was requesting documents from Tai He until a short time before the close of the planned discovery period. Doc. 96-13 at 54:5-:20. This does not indicate full cooperation and, regardless, Willowood was in a better position than Syngenta to obtain the relevant production records. *See Creative Compounds*, 651 F.3d at 1314-15. In any event, the plain language of § 295 indicates that Syngenta's, and not Willowood's, actions are determinative to the "reasonable efforts" question.

Willowood also contends that it has given Syngenta information about the manufacturing process showing that DABCO is not used, and that the burden should not be shifted merely because Syngenta does not like Willowood's evidence. Certainly Willowood is correct that the burden should not be shifted where discovery indicates a non-infringing process. *See Nutrinova*, 224 F.3d at 1360. Here, however, Syngenta has

produced significant evidence that DABCO is used, and Willowood has not suggested a non-infringing reason for the appearance of DABCO in Syngenta's tests. Nor has it made Tai He's production records available to Syngenta.

Because Syngenta has shown a substantial likelihood of infringement and made reasonable but unsuccessful discovery efforts to obtain Tai He's production records, the Court will shift the burden under § 295 to Willowood to show non-infringement of the '761 Patent.

iii. Syngenta's Motion to Exclude Lab Analyses and Expert Testimony

The '761 Patent claims a process to make azoxystrobin technical using DABCO as a catalyst. As previously discussed, Willowood contends that Tai He uses a different process, without DABCO, to make its azoxystrobin technical and that its importation of Tai He's azoxystrobin technical did not infringe the '761 Patent. To support this contention, it offers test reports from Product Safety Laboratories (PSL) and EAG Laboratories (EAG) on the absence of DABCO in azoxystrobin technical and testimony from Dr. Lipton explaining the test reports. *See* Doc. 99-2 at ¶¶ 24-26, pp. 24-110. Syngenta asserts that the Court should exclude test reports from PSL and EAG and Dr. Lipton's interpretation of those reports under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), because the testing was fundamentally flawed and will not assist the trier of fact.

1. The EAG Test and Dr. Lipton's Related Testimony

Willowood admits that EAG did not test azoxystrobin technical, but rather a form of azoxystrobin from a stage of manufacturing before the condensation reaction, when

DABCO is added under the '761 Patent's claimed process. Doc. 102 at 17; *see* Doc. 96-4 at ¶ 26. In other words, EAG tested for DABCO at a point during the process when DABCO would not have yet been added. The absence of DABCO is hardly surprising under those circumstances. To the extent Willowood offers the EAG test to show that the absence of DABCO before the condensation step tends to prove that Willowood did not infringe the '761 Patent's claimed process, the Court will exclude the test and Dr. Lipton's related testimony.

Willowood suggests that the EAG test shows that DABCO was not present before the condensation step, and that this may be otherwise relevant. Doc. 137 at 125:11-126:2. Syngenta contends that even if this is so, it would tend to confuse the jury and be unfairly prejudicial. *See* Fed. R. Evid. 403. If and when Willowood decides to offer the EAG test into evidence at trial, it shall advise the Court outside the presence of the jury.

2. The PSL Test

PSL analyzed azoxystrobin technical from Tai He's completed process. Its finding that the sample did not contain DABCO is relevant to the issue of whether Tai He's manufacturing process infringes the '761 Patent. Based on its own testing, Syngenta contends that PSL's test lacked sufficient sensitivity to detect DABCO. However, Dr. Lipton critiques the reliability and methodology of Syngenta's tests and testifies that PSL performed its analysis "to a very high level of confidence." *See* Doc. 99-2 at ¶¶ 13-20, 24. Syngenta has not challenged his qualifications to offer this opinion.

The jury should determine the appropriate weight to be given to PSL's test and Dr. Lipton's testimony explaining the PSL test. *See i4i Ltd. P'ship v. Microsoft Corp.*, 598

F.3d 831, 852 (Fed. Cir. 2010), *aff'd*, 564 U.S. 91 (2011). The Court will deny the motion to exclude as to the PSL test and Dr. Lipton's corresponding opinion because they are relevant to whether the process for making Willowood's azoxystrobin technical infringes on the '761 Patent and they are based on sufficient data and reliable methods to reach the jury. *See* Fed. R. Evid. 702.

V. Counts V and VI: Copyright Claims

Willowood moves for summary judgment on Syngenta's claims for copyright violation. The Court will rule by separate order on this aspect of Willowood's motion, along with Syngenta's motion to exclude certain evidence offered by Willowood in support of summary judgment on these claims.

VI. Conclusion

For the reasons stated, the Court will grant summary judgment in favor of Syngenta as to validity of the '076, '256, and '138 Patents; will grant Syngenta's motion as to infringement of the '076 and '256 Patents by Willowood USA and Willowood, LLC and deny it as to Willowood Limited; will deny Syngenta's motion as to infringement of the '138 patent and as to validity and infringement of the '761 patent; and will deny Willowood's motion as to the infringement of the '761 patent. The Court will also grant in part, deny in part, and otherwise defer Syngenta's motion to exclude as to Dr. Lipton's testimony, as stated herein.

Willowood's motion on Syngenta's copyright claims will be resolved by separate order. The Court will also resolve by separate order Syngenta's remaining motions to

exclude certain evidence proffered by Willowood related to the copyright claim, *see* Docs. 90, 106, and damages. *See* Doc. 90.

It is **ORDERED** that the plaintiff's motion for summary judgment, Doc. 93, is **GRANTED in part and DENIED in part** and the defendants' motion for summary judgment, Doc. 87, is **DENIED in part and is otherwise retained under advisement**, as follows:

1. Counts I and II: The Court grants summary judgment in favor of Syngenta as to validity for the '076 and '256 Patents and in favor of Syngenta as to infringement of the '076 and '256 Patents by Willowood, LLC and Willowood USA, LLC. The Court denies summary judgement as to infringement by Willowood Limited. The issues remaining for trial are infringement by Willowood Limited, willfulness, and damages.
2. Count III: The Court grants summary judgment to Syngenta as to validity of the '138 Patent and denies summary judgment as to infringement. The issues of infringement, willfulness, and damages remain for trial.
3. Count IV: The Court denies Syngenta's motion for summary judgment on validity and infringement of the '761 Patent and denies Willowood's motion for summary judgment on infringement. The Court grants Syngenta's request to shift the burden to prove non-infringement to Willowood under § 295. All issues related to Count IV remain for trial.

4. Counts V and VI: The Court retains under advisement the part of Willowood's motion for summary judgment directed towards Syngenta's copyright claims and will rule on this aspect of the motion by separate order.

It is further **ORDERED** that the plaintiff's motion to exclude certain expert opinions, Doc. 90, is **GRANTED in part, DENIED in part, and DEFERRED in part** and is **otherwise retained under advisement** as follows:

1. The Court grants the motion to exclude Dr. Lipton's testimony about the validity of the '138 Patent. Subject to developments at trial, the Court also grants the motion to exclude the EAG test and Dr. Lipton's related testimony. The Court defers until trial the question of admissibility of the claims chart for the '761 Patent in Dr. Lipton's report. Otherwise, the Court denies the motion directed towards Dr. Lipton's testimony.
2. The Court retains under advisement the remaining issues raised by the motion, relating to testimony of Mr. Steven Schatzow and Mr. John C. Jarosz.

This the 24th day of March, 2017.

UNITED STATES DISTRICT JUDGE